



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

September 15, 2011

Mr. Naro Kuch
Environmental Manager
Sierra Aluminum Company
2345 Fleetwood Drive
Riverside, CA 92509

Dear Mr. Kuch:

Subject: Final Title V Renewal Permit

Enclosed is your final Title V renewal permit that has been issued by the South Coast Air Quality Management District (AQMD) under Application No. 522158 for your facility located at 2345 Fleetwood Drive, Riverside, CA. This final Title V renewal permit becomes effective today.

Please review all sections of your Title V renewal permit carefully and make sure that you comply with all requirements including, but not limited to, the monitoring, recordkeeping, and reporting requirements (i.e. semi-annual monitoring report, annual compliance certification report, etc.) specified in this Title V permit. All reporting forms can be downloaded from the AQMD website at <http://www.aqmd.gov/titlev/apply.html>.

Thank you for providing the necessary information that allowed the AQMD to complete the renewal of your Title V permit. If you have any questions, please contact Dixie Richards at 909.396.2395.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian L. Yeh", is written over a diagonal line that extends from the bottom right of the signature area towards the bottom right of the page.

Brian L. Yeh
Senior Manager
Mechanical, Chemical, and Public Services

Enclosures
Certified Mail/Return Receipt Requested

BLY:DR



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765

Title Page
Facility ID: 054402
Revision #: 30
Date: September 15, 2011

FACILITY PERMIT TO OPERATE

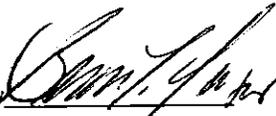
**SIERRA ALUMINUM COMPANY
2345 FLEETWOOD
RIVERSIDE, CA 92509**

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.
EXECUTIVE OFFICER

By 
Mohsen Nazemi, P.E.
Deputy Executive Officer
Engineering & Compliance



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

TABLE OF CONTENTS

Section	Description	Revision #	Date Issued
A	Facility Information	8	09/15/2011
B	RECLAIM Annual Emission Allocation	17	07/01/2011
C	Facility Plot Plan	TO BE DEVELOPED	
D	Facility Description and Equipment Specific Conditions	12	09/15/2011
E	Administrative Conditions	7	07/01/2000
F	RECLAIM Monitoring and Source Testing Requirements	4	07/01/1999
G	Recordkeeping and Reporting Requirements for RECLAIM Sources	4	07/01/1999
H	Permit To Construct and Temporary Permit to Operate	9	10/04/2006
I	Compliance Plans & Schedules	3	07/01/1999
J	Air Toxics	2	09/15/2011
K	Title V Administration	2	09/15/2011
Appendix			
A	NOx and SOx Emitting Equipment Exempt From Written Permit Pursuant to Rule 219	3	07/01/1999
B	Rule Emission Limits	2	09/15/2011



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

SECTION A: FACILITY INFORMATION

LEGAL OWNER &/OR OPERATOR: SIERRA ALUMINUM COMPANY

LEGAL OPERATOR (if different than owner):

EQUIPMENT LOCATION: 2345 FLEETWOOD
RIVERSIDE, CA 92509-2426

MAILING ADDRESS: 2345 FLEETWOOD DR
RIVERSIDE, CA 92509

RESPONSIBLE OFFICIAL: BILL HUNTER

TITLE: PRESIDENT

TELEPHONE NUMBER: (951) 781-7800

CONTACT PERSON: NARO S. KUCH

TITLE: ENVIRONMENTAL MANAGER

TELEPHONE NUMBER: (951) 360-8292

TITLE V PERMIT ISSUED: September 15, 2011

TITLE V PERMIT EXPIRATION DATE: September 14, 2016

TITLE V	RECLAIM
YES	NOx: YES SOx: NO CYCLE: 2 ZONE: INLAND



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION

The annual allocation of NO_x RECLAIM Trading Credits (RTCs) for this facility is calculated pursuant to Rule 2002. Total NO_x emission shall not exceed such annual allocations unless the operator obtains RTCs corresponding to the facility's increased emissions in compliance with Rules 2005 and 2007.

The level of Starting Allocation plus Non-Tradable Credits used to determine compliance with Rule 2005(c)(4) and applicability of Rule 2005(e) - Trading Zone Restrictions is listed on the last page of this Section.

The following table lists the annual allocations that were issued to this facility and the amounts of RTCs held by this facility on the day of printing this Section.

RECLAIM POLLUTANT ANNUAL ALLOCATION (POUNDS)

Year		Zone	NO _x RTC Initially Allocated	NO _x RTC ¹ Holding as of 07/01/2011 (pounds)	Non-Tradable ² Non-Usable RTCs (pounds)
Begin (month/year)	End				
7/2008	6/2009	Inland	10214	4808	384
1/2009	12/2009	Coastal	0	0	162
7/2009	6/2010	Inland	10214	3915	768
1/2010	12/2010	Coastal	0	2406	243
7/2010	6/2011	Inland	10214	11400	1151
1/2011	12/2011	Coastal	0	2325	324
7/2011	6/2012	Coastal	0	1000	0
7/2011	6/2012	Inland	10214	11016	1535
1/2012	12/2012	Coastal	0	2325	324
7/2012	6/2013	Coastal	0	1000	0
7/2012	6/2013	Inland	10214	11016	1535
1/2013	12/2013	Coastal	0	2325	324
7/2013	6/2014	Coastal	0	1000	0
7/2013	6/2014	Inland	10214	11016	1535
1/2014	12/2014	Coastal	0	2325	324
7/2014	6/2015	Coastal	0	1000	0
7/2014	6/2015	Inland	10214	11016	1535

Footnotes:

1. This number may change due to pending trades, emissions reported under Quarterly Certification of Emissions Report (QCER) and Annual Permit Emission Program (APEP) Report required pursuant to Rule 2004, or deductions made pursuant to Rule 2010(b). The most recent total RTC information can be obtained from the District's RTC Listing.
2. The use of such credits is subject to restrictions set forth in paragraph (f)(1) of Rule 2002.



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION

The annual allocation of NO_x RECLAIM Trading Credits (RTCs) for this facility is calculated pursuant to Rule 2002. Total NO_x emission shall not exceed such annual allocations unless the operator obtains RTCs corresponding to the facility's increased emissions in compliance with Rules 2005 and 2007.

The level of Starting Allocation plus Non-Tradable Credits used to determine compliance with Rule 2005(c)(4) and applicability of Rule 2005(e) - Trading Zone Restrictions is listed on the last page of this Section.

The following table lists the annual allocations that were issued to this facility and the amounts of RTCs held by this facility on the day of printing this Section.

RECLAIM POLLUTANT ANNUAL ALLOCATION (POUNDS)

Year Begin End (month/year)	Zone	NO _x RTC Initially Allocated	NO _x RTC ¹ Holding as of 07/01/2011 (pounds)	Non-Tradable ² Non-Usable RTCs (pounds)
1/2015 12/2015	Coastal	0	2325	324
7/2015 6/2016	Coastal	0	1000	0
7/2015 6/2016	Inland	10214	11016	1535
1/2016 12/2016	Coastal	0	2325	324
7/2016 6/2017	Coastal	0	1000	0
7/2016 6/2017	Inland	10214	11016	1535
1/2017 12/2017	Coastal	0	2325	324
7/2017 6/2018	Coastal	0	1000	0
7/2017 6/2018	Inland	10214	11016	1535
1/2018 12/2018	Coastal	0	2325	324
7/2018 6/2019	Coastal	0	1000	0
7/2018 6/2019	Inland	10214	11016	1535
1/2019 12/2019	Coastal	0	2325	324
7/2019 6/2020	Coastal	0	1000	0
7/2019 6/2020	Inland	10214	11016	1535
1/2020 12/2020	Coastal	0	2325	324
7/2020 6/2021	Coastal	0	1000	0

Footnotes:

1. This number may change due to pending trades, emissions reported under Quarterly Certification of Emissions Report (QCER) and Annual Permit Emission Program (APEP) Report required pursuant to Rule 2004, or deductions made pursuant to Rule 2010(b). The most recent total RTC information can be obtained from the District's RTC Listing.
2. The use of such credits is subject to restrictions set forth in paragraph (f)(1) of Rule 2002.



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION

The annual allocation of NOx RECLAIM Trading Credits (RTCs) for this facility is calculated pursuant to Rule 2002. Total NOx emission shall not exceed such annual allocations unless the operator obtains RTCs corresponding to the facility's increased emissions in compliance with Rules 2005 and 2007.

The level of Starting Allocation plus Non-Tradable Credits used to determine compliance with Rule 2005(c)(4) and applicability of Rule 2005(e) - Trading Zone Restrictions is listed on the last page of this Section.

The following table lists the annual allocations that were issued to this facility and the amounts of RTCs held by this facility on the day of printing this Section.

RECLAIM POLLUTANT ANNUAL ALLOCATION (POUNDS)

Year Begin End (month/year)	Zone	NOx RTC Initially Allocated	NOx RTC ¹ Holding as of 07/01/2011 (pounds)	Non-Tradable ² Non-Usable RTCs (pounds)
7/2020 6/2021	Inland	10214	11016	1535
1/2021 12/2021	Coastal	0	2325	324
7/2021 6/2022	Coastal	0	1000	0
7/2021 6/2022	Inland	10214	11016	1535
1/2022 12/2022	Coastal	0	2325	324
7/2022 6/2023	Coastal	0	1000	0
7/2022 6/2023	Inland	10214	11016	1535
1/2023 12/2023	Coastal	0	2325	324
7/2023 6/2024	Coastal	0	1000	0
7/2023 6/2024	Inland	10214	11016	1535
1/2024 12/2024	Coastal	0	2325	324
7/2024 6/2025	Coastal	0	1000	0
7/2024 6/2025	Inland	10214	11016	1535
1/2025 12/2025	Coastal	0	2325	324
7/2025 6/2026	Coastal	0	1000	0
7/2025 6/2026	Inland	10214	11016	1535
1/2026 12/2026	Coastal	0	2325	324

Footnotes:

1. This number may change due to pending trades, emissions reported under Quarterly Certification of Emissions Report (QCER) and Annual Permit Emission Program (APEP) Report required pursuant to Rule 2004, or deductions made pursuant to Rule 2010(b). The most recent total RTC information can be obtained from the District's RTC Listing.
2. The use of such credits is subject to restrictions set forth in paragraph (f)(1) of Rule 2002.



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION

The annual allocation of RECLAIM Trading Credits (RTCs) for this facility is calculated pursuant to Rule 2002. If the facility submits a permit application to increase in an annual allocation to a level greater than the facility's starting Allocation plus Non-Tradable credits as listed below, the application will be evaluated for compliance with Rule 2005 (c)(4). Rule 2005 (e) - Trading Zone Restrictions applies if an annual allocation is increased to a level greater than the facility's Starting Allocation plus Non-Tradable Credits:

Year		Zone	NOx RTC	Non-Tradable
Begin	End		Starting Allocation	Credits(NTC)
(month/year)			(pounds)	(pounds)
7/1994	6/1995	Inland	21440	0



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

SECTION C: FACILITY PLOT PLAN

(TO BE DEVELOPED)



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process J ALUMINUM MELTING					
FURNACE, NO. 1, ALUMINUM MELTING, REVERBERATORY, NATURAL GAS, 25 MMBTU/HR WITH A/N: 452779 BURNER, NATURAL GAS, NORTH AMERICAN MFG. COMPANY, MODEL 4343-12-B, WITH LOW NOX BURNER, 25 MMBTU/HR	D2		NOX: LARGE SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 40 PPMV NATURAL GAS (3) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986; RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B59.2, B59.3, C1.1, C1.3, D12.2, D323.1
INJECTOR, IN-LINE FLUXING UNIT WITH A ROTATING NOZZLE, NATURAL GAS, PROPANE, COMMON TO D2 AND D36, 0.22 MMBTU/HR A/N: 452779	D3		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 12.8 LBS/1000 GAL PROPANE (1) [RULE 2012, 5-6-2005]; NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986; RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B59.1, B75.1, C1.1, D12.2, D323.1

- * (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: ALUMINUM MELTING					
FURNACE, NO. 2, ALUMINUM MELTING, REVERBERATORY, NATURAL GAS, 90,000 POUND CAPACITY, WITH LOW NOX BURNER, 25 MMBTU/HR WITH A/N: 452780 BURNER, NATURAL GAS, NORTH AMERICAN MFG. COMPANY, MODEL 4343-12, WITH LOW NOX BURNER, 25 MMBTU/HR	D36		NOX: LARGE SOURCE**	CO: 2000 PPMV NATURAL GAS (5) [RULE 407, 4-2-1982]; NOX: 40 PPMV NATURAL GAS (3) [RULE 2012, 5-6-2005]; NOX: 40 PPMV NATURAL GAS (4) [RULE 1303(a)(1) -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; PM: (9) [RULE 404, 2-7-1986; RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409, 8-7-1981]	B59.2, B59.3, C1.1, C1.3, D12.2, D323.1
Process 2: HEAT TREATING					
System 1: HOMOGENIZING FURNACES					
FURNACE, HEAT TREATING, HOMOGENIZING NO. 1, NATURAL GAS, STANDEL INTERNATIONAL, 14 MMBTU/HR A/N: 452776	D1		NOX: LARGE SOURCE**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 40 PPMV NATURAL GAS (3) [RULE 2012, 5-6-2005]; NOX: 112 PPMV PROPANE (3) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	C1.2, C6.1, D12.1, D12.2, D323.1

* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 2: HEAT TREATING					
FURNACE, HEAT TREATING, HOMOGENIZING FURNACE NO. 2, NATURAL GAS, STANDEL INTERNATIONAL, 14 MMBTU/HR WITH A/N: 452778 BURNER, NATURAL GAS, WITH LOW NOX BURNER, 1 TOTAL; 14 MMBTU/HR	D40		NOX: LARGE SOURCE**	CO: 2000 PPMV NATURAL GAS (5) [RULE 407, 4-2-1982]; NOX: 35 PPMV NATURAL GAS (3) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409, 8-7-1981]	B59.2, B59.3, C1.2, D323.1
FURNACE, HEAT TREATING, HOMOGENIZING NO. 3, NATURAL GAS, REMELT TECHNOLOGIES, WITH LOW NOX BURNER, 24 MMBTU/HR WITH A/N: 452775 BURNER, NATURAL GAS, MAXON, MODEL 6" KINEMAX, WITH LOW NOX BURNER, 4 TOTAL; 6 MMBTU/HR	D43		NOX: LARGE SOURCE**	CO: 2000 PPMV NATURAL GAS (5) [RULE 407, 4-2-1982]; NOX: 40 PPMV NATURAL GAS (3) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409, 8-7-1981]	C1.2, C6.2, D12.1, D12.2, D323.1
System 2: BILLET FURNACES					
FURNACE, HEAT TREATING, ALUMINUM BILLET NO.1, NATURAL GAS, GRANCO CLARK, 5.47 MMBTU/HR A/N: 452783	D7		NOX: PROCESS UNIT**	CO: 2000 PPMV NATURAL GAS (5) [RULE 407, 4-2-1982]; NOX: 25 PPMV NATURAL GAS (3) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	C1.4, D12.2, D29.1, D323.1

- * (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 2: HEAT TREATING					
FURNACE, HEAT TREATING, ALUMINUM BILLET NO. 2, NATURAL GAS, GRANCO CLARK, 5.47 MMBTU/HR A/N: 452784	D8		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 25 PPMV NATURAL GAS (3) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	C1.4, D12.2, D29.1, D323.1
FURNACE, HEAT TREATING, ALUMINUM BILLET NO. 3, NATURAL GAS, GRANCO CLARK, WITH HOT-JET RECUPERATION, WITH LOW NOX BURNER, FLUE GAS RECIRCULATION, 7.2 MMBTU/HR WITH A/N: 452782 BURNER, NATURAL GAS, GRANCO CLARK MFG, MODEL 812-40-4, WITH LOW NOX BURNER, 4 TOTAL; 7.2 MMBTU/HR	D28		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 30 PPMV NATURAL GAS (4) [RULE 2005, 5-6-2005]; NOX: 30 PPMV NATURAL GAS (3) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A63.1, B59.4, C1.4, D12.2, D29.1, D323.1
System 3: AGING FURNACES					
FURNACE, ANNEALING, ALUMINUM AGING NO. 1, NATURAL GAS, 2.5 MMBTU/HR A/N: 452785	D6		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 40 PPMV NATURAL GAS (3) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 10-5-1979; RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	C1.5, D12.2, D29.1, D323.1, D332.1

- * (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 2: HEAT TREATING					
FURNACE, ANNEALING, ALUMINUM AGING NO. 2, NATURAL GAS, 2.5 MMBTU/HR A/N: 452789	D9		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 40 PPMV NATURAL GAS (3) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	C1.5, D12.2, D29.1, D323.1
FURNACE, ANNEALING, ALUMINUM AGING NO. 3, NATURAL GAS, WITH LOW NOX BURNER, 2.5 MMBTU/HR WITH A/N: 452787	D30		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 40 PPMV NATURAL GAS (3) [RULE 2012, 5-6-2005]; NOX: 65 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A63.2, B59.4, C1.5, D12.2, D29.1, D323.1
BURNER, NATURAL GAS, NORTH AMERICAN MFG CO, MODEL 4988-2500 ZEPHYR, WITH LOW NOX BURNER, 2.5 MMBTU/HR					

- * (1) (1A) (1B) Denotes RECLAIM emission factor
- (3) Denotes RECLAIM concentration limit
- (5) (5A) (5B) Denotes command and control emission limit
- (7) Denotes NSR applicability limit
- (9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
- (4) Denotes BACT emission limit
- (6) Denotes air toxic control rule limit
- (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
- (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 2: HEAT TREATING					
FURNACE, ANNEALING, ALUMINUM AGING NO.4, NATURAL GAS, WITH LOW NOX BURNER, 2.5 MMBTU/HR WITH A/N: 452786 BURNER, NATURAL GAS, NORTH AMERICAN MFG CO, MODEL 4988-2500 ZEPHYR, WITH LOW NOX BURNER, 2.5 MMBTU/HR	D32		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 40 PPMV NATURAL GAS (3) [RULE 2012, 5-6-2005]; NOX: 65 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	A63.2, B59.4, C1.5, D12.2, D29.1, D323.1
Process 4: R-219 EXEMPT EQUIPMENT SUBJECT TO SOURCE SPECIFIC RULES					
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, LOW USE OR EMISSIONS	E35			VOC: (9) [RULE 1107, 11-9-2001; RULE 1107, 1-6-2006; RULE 1171, 11-7-2003; RULE 1171, 5-1-2009]	

* (1) (1A) (1B) Denotes RECLAIM emission factor
 (3) Denotes RECLAIM concentration limit
 (5) (5A) (5B) Denotes command and control emission limit
 (7) Denotes NSR applicability limit
 (9) See App B for Emission Limits
 (2) (2A) (2B) Denotes RECLAIM emission rate
 (4) Denotes BACT emission limit
 (6) Denotes air toxic control rule limit
 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 (10) See section J for NESHAP/MACT requirements
 ** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

SECTION D: DEVICE ID INDEX

**The following sub-section provides an index
to the devices that make up the facility
description sorted by device ID.**



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

SECTION D: DEVICE ID INDEX

Device Index For Section D			
Device ID	Section D Page No.	Process	System
D1	2	2	1
D2	1	1	0
D3	1	1	0
D6	4	2	3
D7	3	2	2
D8	4	2	2
D9	5	2	3
D28	4	2	2
D30	5	2	3
D32	6	2	3
E35	6	4	0
D36	2	1	0
D40	3	2	1
D43	3	2	1



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

DEVICE CONDITIONS

A. Emission Limits

A63.1 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
ROG	Less than or equal to 26 LBS IN ANY ONE MONTH
SOX	Less than or equal to 3 LBS IN ANY ONE MONTH
CO	Less than or equal to 125 LBS IN ANY ONE MONTH
PM	Less than or equal to 26 LBS IN ANY ONE MONTH

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D28]

A63.2 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
ROG	Less than or equal to 10 LBS IN ANY ONE MONTH
SOX	Less than or equal to 1 LBS IN ANY ONE MONTH
CO	Less than or equal to 47 LBS IN ANY ONE MONTH
PM	Less than or equal to 10 LBS IN ANY ONE MONTH

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D30, D32]

B. Material/Fuel Type Limits

B59.1 The operator shall only use the following material(s) in this device :

Chlorine

Aluminum

Argon

[**RULE 401, 3-2-1984; RULE 401, 11-9-2001**]

[Devices subject to this condition : D3]

B59.2 The operator shall not use the following material(s) in this device :

Metal contaminated with rubber, plastic, paper, rags, oil, grease
coated metal

Smoke producing material

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 401,
3-2-1984; RULE 401, 11-9-2001**]

[Devices subject to this condition : D2, D36, D40]

B59.3 The operator shall only use the following material(s) in this device :



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

clean aluminum

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D2, D36, D40]

B59.4 The operator shall not use the following material(s) in this device :

Metals contaminated with rubber, plastics, paper, rags, oil, grease, or similiar
smoke-producing materials

Aluminum chloride

Chlorine

Fluoride

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 401,
3-2-1984; RULE 401, 11-9-2001]

[Devices subject to this condition : D28, D30, D32]

B75.1 The operator shall not use propane in this equipment except under the following
circumstance(s):

Natural gas curtailment

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D3]



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

C. Throughput or Operating Parameter Limits

C1.1 The operator shall limit the natural gas fuel usage to no more than 23 MM cubic feet in any one calendar month.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

This limit shall be based on the total combined limit for equipment device D2, D3 and D36.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D2, D3, D36]

C1.2 The operator shall limit the fuel usage to no more than 12 MM cubic feet in any one calendar month.

This limit shall be based on the total combined limit for equipment device D1, D40 and D43.

To comply with this condition, the operator shall install and maintain a(n) non-resettable totalizing fuel meter to accurately indicate the fuel usage in the fuel supply line.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1, D40, D43]



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

C1.3 The operator shall limit the material processed to no more than 9000 ton(s) in any one month.

For the purpose of this condition, material processed shall be defined as aluminum.

This limit shall be based on the total combined limit for equipment devices D2 and D36.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D2, D36]

C1.4 The operator shall limit the fuel usage to no more than 4.3 MM cubic feet in any one calendar month.

To comply with this condition, the operator shall install and maintain a(n) non-resettable totalizing fuel meter to accurately indicate the fuel usage in the fuel supply line.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

This limit shall be based on the total combined limit for equipment device D7, D8 and D28.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D7, D8, D28]

C1.5 The operator shall limit the fuel usage to no more than 3.2 MM cubic feet in any one calendar month.



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

To comply with this condition, the operator shall install and maintain a(n) non-resettable totalizing fuel meter to accurately indicate the fuel usage in the fuel supply line.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

This limit shall be based on the total combined limit for equipment device D6, D9, D30 and D32.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D6, D9, D30, D32]

- C6.1 The operator shall use this equipment in such a manner that the temperature being monitored, as indicated below, does not exceed 1070 Deg F.

To comply with this condition, the operator shall monitor the temperature as specified in condition number 12-1.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D1]

- C6.2 The operator shall use this equipment in such a manner that the temperature being monitored, as indicated below, does not exceed 1060 Deg F.

To comply with this condition, the operator shall monitor the temperature as specified in condition number 12-1.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D43]



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

D. Monitoring/Testing Requirements

D12.1 The operator shall install and maintain a(n) gauge to accurately indicate the temperature in the oven.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D1, D43]

D12.2 The operator shall install and maintain a(n) non-resettable totalizing fuel meter to accurately indicate the fuel usage in the gas supply line to this equipment.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1, D2, D3, D6, D7, D8, D9, D28, D30, D32, D36, D43]

D29.1 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NOX emissions	Approved District method	District-approved averaging time	Outlet

The test shall be conducted every five-year period, with the first five-year period ending June 30, 2004.

The test shall be conducted within 12 months of the approval of the concentration limit.

[RULE 2012, 5-6-2005]



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D6, D7, D8, D9, D28, D30, D32]



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

D323.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a semi-annual basis, at least, unless the equipment did not operate during the entire semi-annual period. The routine semi-annual inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

- 1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions;
- 3). Date and time visible emission was abated; and
- 4). All visible emission observation records by operator or a certified smoke reader.



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D1, D2, D3, D6, D7, D8, D9, D28, D30, D32, D36, D40, D43]

D332.1 The operator shall determine compliance with the CO emission limit(s) by conducting a test at least once every five years using a portable analyzer and AQMD-approved test method or, if not available, a non-AQMD approved test method. The test shall be conducted when the equipment is operating under normal conditions to demonstrate compliance with Rule 407 concentration limit. The operator shall comply with all general testing, reporting, and recordkeeping requirements in Sections E and K of this permit.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D6]



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION E: ADMINISTRATIVE CONDITIONS

The operating conditions in this section shall apply to all permitted equipment at this facility unless superseded by condition(s) listed elsewhere in this permit.

1. The permit shall remain effective unless this permit is suspended, revoked, modified, reissued, denied, or it is expired for nonpayment of permit processing or annual operating fees. [201, 203, 209, 301]
 - a. The permit must be renewed annually by paying annual operating fees, and the permit shall expire if annual operating fees are not paid pursuant to requirements of Rule 301(d). [301(d)]
 - b. The Permit to Construct listed in Section H shall expire one year from the Permit to Construct issuance date, unless a Permit to Construct extension has been granted by the Executive Officer or unless the equipment has been constructed and the operator has notified the Executive Officer prior to the operation of the equipment, in which case the Permit to Construct serves as a temporary Permit to Operate. [202, 205]
 - c. The Title V permit shall expire as specified under Section K of the Title V permit. The permit expiration date of the Title V facility permit does not supercede the requirements of Rule 205. [205, 3004]
2. The operator shall maintain all equipment in such a manner that ensures proper operation of the equipment. [204]
3. This permit does not authorize the emissions of air contaminants in excess of those allowed by Division 26 of the Health and Safety Code of the State of California or the Rules and Regulations of the AQMD. This permit cannot be considered as permission to violate existing laws, ordinances, regulations or statutes of other governmental agencies. [204]
4. The operator shall not use equipment identified in this facility permit as being connected to air pollution control equipment unless they are so vented to the identified air pollution control equipment which is in full use and which has been included in this permit. [204]



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION E: ADMINISTRATIVE CONDITIONS

5. The operator shall not use any equipment having air pollution control device(s) incorporated within the equipment unless the air pollution control device is in full operation. [204]
6. The operator shall maintain records to demonstrate compliance with rules or permit conditions that limit equipment operating parameters, or the type or quantity of material processed. These records shall be made available to AQMD personnel upon request and be maintained for at least: [204]
 - a. Three years for a facility not subject to Title V; or
 - b. Five years for a facility subject to Title V.
7. The operator shall maintain and operate all equipment to ensure compliance with all emission limits as specified in this facility permit. Compliance with emission limits shall be determined according to the following specifications, unless otherwise specified by AQMD rules or permit conditions: [204]
 - a. For internal combustion engines and gas turbines, measured concentrations shall be corrected to 15 percent stack-gas oxygen content on a dry basis and be averaged over a period of 15 consecutive minutes; [1110.2, 1134, 204]
 - b. For other combustion devices, measured concentrations shall be corrected to 3 percent stack-gas oxygen content on a dry basis and be averaged over a period of 15 consecutive minutes; [1146, 1146.1, 204]
 - c. For a large NO_x source, compliance with a RECLAIM concentration limit shall be measured over a continuous 60 minutes for that source; [2012]
 - d. For non-combustion sources, compliance with emission limits shall be determined and averaged over a period of 60 minutes. [204]



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION E: ADMINISTRATIVE CONDITIONS

- e. For the purpose of determining compliance with Rule 407, carbon monoxide (CO) shall be measured on a dry basis and be averaged over 15 consecutive minutes, and sulfur compound which would exist as liquid or gas at standard conditions shall be calculated as sulfur dioxide (SO₂) and be averaged over 15 consecutive minutes; [407]
- f. For the purpose of determining compliance with Rule 409, combustion contaminant emission measurements shall be corrected to 12 percent carbon dioxide (CO₂) at standard conditions and averaged over 15 consecutive minutes. [409]
- g. For the purpose of determining compliance with Rule 475, combustion contaminant emission measurements shall be corrected to 3 percent of oxygen (O₂) at standard conditions and averaged over 15 consecutive minutes or any other averaging time specified by the Executive Officer. [475]
8. All equipment operating under the RECLAIM program shall comply concurrently with all provisions of AQMD Rules and Regulation, except those listed in Table 1 of Rule 2001 for NO_x RECLAIM sources and Table 2 of Rule 2001 for SO_x RECLAIM sources. Those provisions listed in Tables 1 or 2 shall not apply to NO_x or SO_x emissions after the date the facility has demonstrated compliance with all monitoring and reporting requirements of Rules 2011 or 2012, as applicable. Provisions of the listed AQMD rules in Tables 1 or 2 which have initial implementation dates in 1994 shall not apply to a RECLAIM NO_x or SO_x source, respectively. [2001]
9. The operator shall, when a source test is required by AQMD, provide a source test protocol to AQMD no later than 60 days before the proposed test date. The test shall not commence until the protocol is approved by AQMD. The test protocol shall contain the following information: [204, 304]
 - a. Brief description of the equipment tested.



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION E: ADMINISTRATIVE CONDITIONS

- b. Brief process description, including maximum and normal operating temperatures, pressures, through-put, etc.
 - c. Operating conditions under which the test will be performed.
 - d. Method of measuring operating parameters, such as fuel rate and process weight. Process schematic diagram showing the ports and sampling locations, including the dimensions of the ducts/stacks at the sampling locations, and distances of flow disturbances, (e.g. elbows, tees, fans, dampers) from the sampling locations (upstream and downstream).
 - e. Brief description of sampling and analytical methods used to measure each pollutant, temperature, flow rates, and moisture.
 - f. Description of calibration and quality assurance procedures.
 - g. Determination that the testing laboratory qualifies as an "independent testing laboratory" under Rule 304 (no conflict of interest).
10. The operator shall submit a report no later than 60 days after conducting a source test, unless otherwise required by AQMD Rules or equipment-specific conditions. The report shall contain the following information: [204]
- a. The results of the source test.
 - b. Brief description of the equipment tested.
 - c. Operating conditions under which the test will be performed.
 - d. Method of measuring operating parameters, such as fuel rate and process weight. Process schematic diagram showing the ports and sampling locations, including the dimensions of the ducts/stacks at the sampling locations, and distances of flow disturbances, (e.g. elbows, tees, fans, dampers) from the sampling locations (upstream and downstream).
 - e. Field and laboratory data forms, strip charts and analyses.



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION E: ADMINISTRATIVE CONDITIONS

- f. Calculations for volumetric flow rates, emission rates, control efficiency, and overall control efficiency.
- 11. The operator shall, when a source test is required, provide and maintain facilities for sampling and testing. These facilities shall comply with the requirements of AQMD Source Test Method 1.1 and 1.2. [217]
- 12. Whenever required to submit a written report, notification or other submittal to the Executive Officer, AQMD, or the District, the operator shall mail or deliver the material to: Deputy Executive Officer, Engineering and Compliance, AQMD, 21865 E. Copley Drive, Diamond Bar, CA 91765-4182. [204]



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION F: RECLAIM MONITORING AND SOURCE TESTING REQUIREMENTS

The Facility shall comply with all applicable monitoring and source testing requirements in Regulation XX. These requirements may include but are not limited to the following:

I. NO_x Monitoring Conditions

A. The Operator of a NO_x Major Source, as defined in Rule 2012, shall, as applicable:

Not Applicable

B. The Operator of a NO_x large Source, as defined in Rule 2012, shall, as applicable:

1. Install, maintain, and operate a totalizing fuel meter and any device specified by the Executive Officer as necessary to determine monthly fuel usage or other applicable variables specified in Rule 2012, Appendix A, Table 3-A. The sharing of totalizing fuel meter may be allowed by the Executive Officer if the fuel meter serves large sources which have the same emission factor, concentration limit, or emission rate. The sharing of totalizing fuel meters shall not be allowed for large sources which are required to comply with an annual heat input limit. [2012]
2. Comply at all times with the specified NO_x concentration limit in PPM measured over any continuous 60 minutes for that source or establish an equipment-specific emission rate that is reliable, accurate, representative of that sources emissions, and in accordance with the requirements specified in Rule 2012, Appendix A, Chapter 5. [2012]

C. The Operator of a NO_x Process Unit, as defined in Rule 2012, shall, as applicable:

1. Install, maintain, and operate a totalizing fuel meter or any device approved by the Executive Officer to measure quarterly fuel usage or other applicable variables specified in Rule 2012, Table 2012-1, and Rule 2012, Appendix A, Table 4-A. The sharing of totalizing fuel meters may be allowed by the Executive Officer if the fuel meter serves process units which have the same emission factor or emission rate. The sharing of totalizing meter shall not be allowed for process units which are required to comply with an annual heat input limit. [2012]



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

SECTION F: RECLAIM MONITORING AND SOURCE TESTING REQUIREMENTS

II. NOx Source Testing and Tune-up conditions

1. The operator shall conduct all required NOx source testing in compliance with an AQMD-approved source test protocol. [2012]
2. The operator shall, as applicable, conduct source tests for every large NOx source no later than June 30, 1997 and every 3 years thereafter. The source test shall include the determination of NOx concentration and a relative accuracy audit of the exhaust stack flow determination (e.g. in-stack flow monitor or fuel flow monitor based F-factor calculation). Such source test results shall be submitted per the schedule described by APEP. In lieu of submitting the first source test report, the facility permit holder may submit the results of a source test not more than 3 years old which meets the requirements when conducted. [2012]
3. All NOx large sources and NOx process units shall be tuned-up in accordance with the schedule specified in Rule 2012, Appendix A, Chapter 5, Table 5-B. [2012]



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION G: RECORDKEEPING AND REPORTING REQUIREMENTS FOR RECLAIM SOURCES

The Facility shall comply with all applicable reporting and recordkeeping requirements in Regulation XX. These requirements may include but are not limited to the following:

I. Recordkeeping Requirements for all RECLAIM Sources

1. The operator shall maintain all monitoring data required to be measured or reported pursuant to Rule 2011 and Rule 2012, whichever is applicable. All records shall be made available to AQMD staff upon request and be maintained for at least:
 - a. Three years after each APEP report is submitted to AQMD for a facility not subject to Title V, unless a different time period is required in Rule 2011 or Rule 2012 [2011 & 2012]; or
 - b. Five years after each APEP report is submitted to AQMD for a facility subject to Title V. [3004(a)(4)(E)]
 - c. Notwithstanding the above, all data gathered or computed for intervals of less than 15 minutes shall only be maintained a minimum of 48 hours. [2011 & 2012]
2. The operator shall store on site and make available to the Executive Officer upon request: records used to determine emissions, maintenance records, sources test reports, relative accuracy test audit reports, relative accuracy audit reports and fuel meter calibration records. [2011 & 2012]

II. Reporting Requirements for all RECLAIM Sources

1. The operator shall submit a quarterly certification of emissions including the facility's total NO_x or SO_x emissions, whichever is applicable, for the quarter within 30 days after the end of the first three quarters and 60 days after the end of the fourth quarter of a compliance year. [2011 & 2012]

NO_x Reporting Requirements

- A. The Operator of a NO_x Major Source, as defined in Rule 2012, shall, as applicable:

Not Applicable



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**SECTION G: RECORDKEEPING AND REPORTING REQUIREMENTS FOR
RECLAIM SOURCES**

B. The Operator of a NOx Large Source, as defined in Rule 2012, shall:

1. Install, maintain and operate a modem or any reporting device approved by the Executive Officer to report, to the AQMD, the total monthly NOx mass emissions from each large NOx source. The Operator shall comply with this requirement within 12 months of the date of entry to the RECLAIM Program. Such data shall be reported within 15 days after the end of each calendar month. [2012]

C. The Operator of a NOx Process Unit, as defined in Rule 2012, shall:

1. Electronically report the calculated quarterly NOx emissions for each NOx process unit. The Operator shall comply with this requirement within 12 months of the date of entry to the RECLAIM Program. [2012]



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765

Section H	Page: 1
Facility ID:	054402
Revision #:	9
Date:	October 04, 2006

**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

NONE



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

SECTION I: PLANS AND SCHEDULES

This section lists all plans approved by AQMD for the purposes of meeting the requirements of applicable AQMD rules.

NONE

NOTE: This section does not list compliance schedules pursuant to the requirements of Regulation XXX - Title V Permits; Rule 3004(a)(10)(C). For equipment subject to a variance, order for abatement, or alternative operating condition granted pursuant to Rule 518.2, equipment specific conditions are added to the equipment in Section D or H of the permit.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765

Section J Page: 1
Facility ID: 054402
Revision #: 2
Date: September 15, 2011

**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

SECTION J: AIR TOXICS

NOT APPLICABLE



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION K: TITLE V Administration

GENERAL PROVISIONS

1. This permit may be revised, revoked, reopened and reissued, or terminated for cause, or for failure to comply with regulatory requirements, permit terms, or conditions. [3004(a)(7)(C)]
2. This permit does not convey any property rights of any sort or any exclusive privilege. [3004(a)(7)(E)]

Permit Renewal and Expiration

3. (A) Except for solid waste incineration facilities subject to standards under section 129(e) of the Clean Air Act, this permit shall expire five years from the date that this Title V permit is issued. The operator's right to operate under this permit terminates at midnight on this date, unless the facility is protected by an application shield in accordance with Rule 3002(b), due to the filing of a timely and complete application for a Title V permit renewal, consistent with Rule 3003. [3004(a)(2), 3004(f)]

(B) A Title V permit for a solid waste incineration facility combusting municipal waste subject to standards under Section 129(e) of the Clean Air Act shall expire 12 years from the date of issuance unless such permit has been renewed pursuant to this regulation. These permits shall be reviewed by the Executive Officer at least every five years from the date of issuance. [3004(f)(2)]
4. To renew this permit, the operator shall submit to the Executive Officer an application for renewal at least 180 days, but not more than 545 days, prior to the expiration date of this permit. [3003(a)(6)]

Duty to Provide Information

5. The applicant for, or holder of, a Title V permit shall furnish, pursuant to Rule 3002(d) and (e), timely information and records to the Executive Officer or designee within a reasonable time as specified in writing by the Executive Officer or designee. [3004(a)(7)(F)]

Payment of Fees

6. The operator shall pay all required fees specified in Regulation III - Fees. [3004(a)(7)(G)]



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION K: TITLE V Administration

Reopening for Cause

7. The Executive Officer will reopen and revise this permit if any of the following circumstances occur:
- (A) Additional regulatory requirements become applicable with a remaining permit term of three or more years. Reopening is not required if the effective date of the requirement is later than the expiration date of this permit, unless the permit or any of its terms and conditions has been extended pursuant to paragraph (f)(4) of Rule 3004.
 - (B) The Executive Officer or EPA Administrator determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
 - (C) The Executive Officer or EPA Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements. [3005(g)(1)]

COMPLIANCE PROVISIONS

8. The operator shall comply with all regulatory requirements, and all permit terms and conditions, except:
- (A) As provided for by the emergency provisions of condition no. 17 or condition no. 18, or
 - (B) As provided by an alternative operating condition granted pursuant to a federally approved (SIP-approved) Rule 518.2.

Any non-compliance with any federally enforceable permit condition constitutes a violation of the Federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or denial of a permit renewal application. Non-compliance may also be grounds for civil or criminal penalties under the California State Health and Safety Code. [3004(a)(7)(A)]



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

SECTION K: TITLE V Administration

9. The operator shall allow the Executive Officer or authorized representative, upon presentation of appropriate credentials to:
- (A) Enter the operator's premises where emission-related activities are conducted, or records are kept under the conditions of this permit;
 - (B) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - (C) Inspect at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - (D) Sample or monitor at reasonable times, substances or parameters for the purpose of assuring compliance with the facility permit or regulatory requirements. [3004(a)(10)(B)]
10. All terms and conditions in this permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the EPA Administrator and citizens under the federal Clean Air Act, unless the term or condition is designated as not federally enforceable. Each day during any portion of which a violation occurs is a separate offense. [3004(g)]
11. A challenge to any permit condition or requirement raised by EPA, the operator, or any other person, shall not invalidate or otherwise affect the remaining portions of this permit. [3007(b)]
12. The filing of any application for a permit revision, revocation, or termination, or a notification of planned changes or anticipated non-compliance does not stay any permit condition. [3004(a)(7)(D)]
13. It shall not be a defense for a person in an enforcement action, including those listed in Rule 3002(c)(2), that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit, except as provided for in "Emergency Provisions" of this section. [3004(a)(7)(H)]



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION K: TITLE V Administration

14. The operator shall not build, erect, install, or use any equipment, the use of which, without resulting in a reduction in the total release of air contaminants to atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Chapter 3 (commencing with Section 41700) of Part 4, of Division 26 of the California Health and Safety Code or of AQMD rules. This rule shall not apply to cases in which the only violation involved is of Section 41700 of the California Health and Safety Code, or Rule 402 of AQMD Rules. [408]
15. Nothing in this permit or in any permit shield can alter or affect:
- (A) Under Section 303 of the federal Clean Air Act, the provisions for emergency orders;
 - (B) The liability of the operator for any violation of applicable requirements prior to or at the time of permit issuance;
 - (C) The applicable requirements of the Acid Rain Program, Regulation XXXI;
 - (D) The ability of EPA to obtain information from the operator pursuant to Section 114 of the federal Clean Air Act;
 - (E) The applicability of state or local requirements that are not "applicable requirements", as defined in Rule 3000, at the time of permit issuance but which do apply to the facility, such as toxics requirements unique to the State; and
 - (F) The applicability of regulatory requirements with compliance dates after the permit issuance date. [3004(c)(3)]
16. For any portable equipment that requires an AQMD or state permit or registration, excluding a) portable engines, b) military tactical support equipment and c) AQMD-permitted portable equipment that are not a major source, are not located at the facility for more than 12 consecutive months after commencing operation, and whose operation does not conflict with the terms or conditions of this Title V permit: 1) the facility operator shall keep a copy of the AQMD or state permit or registration; 2) the equipment operator shall comply with the conditions on the permit or registration and all other regulatory requirements; and 3) the facility operator shall treat the permit or registration as a part of its Title V permit, subject to recordkeeping, reporting and certification requirements. [3004(a)(1)]



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION K: TITLE V Administration EMERGENCY PROVISIONS

17. An emergency¹ constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limit only if:

(A) Properly signed, contemporaneous operating records or other credible evidence demonstrate that:

(1) An emergency occurred and the operator can identify the cause(s) of the emergency;

(2) The facility was operated properly (i.e. operated and maintained in accordance with the manufacturer's specifications, and in compliance with all regulatory requirements or a compliance plan), before the emergency occurred;

(3) The operator took all reasonable steps to minimize levels of emissions that exceeded emissions standard, or other requirements in the permit; and,

(4) The operator submitted a written notice of the emergency to the AQMD within two working days of the time when the emissions limitations were exceeded due to the emergency. The notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

(B) The operator complies with the breakdown provisions of Rule 430 – Breakdown Provisions, or subdivision (i) of Rule 2004 – Requirements, whichever is applicable. [3002(g), 430, 2004(i)]

18. The operator is excused from complying with any regulatory requirement that is suspended by the Executive Officer during a state of emergency or state of war emergency, in accordance with Rule 118 - Emergencies. [118]

¹ "Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the operator, including acts of God, which: (A) requires immediate corrective action to restore normal operation; and (B) causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency; and (C) is not caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION K: TITLE V Administration RECORDKEEPING PROVISIONS

19. In addition to any other recordkeeping requirements specified elsewhere in this permit, the operator shall keep records of required monitoring information, where applicable, that include:
- (A) The date, place as defined in the Title V permit, and time of sampling or measurements;
 - (B) The date(s) analyses were performed;
 - (C) The company or entity that performed the analyses;
 - (D) The analytical techniques or methods used;
 - (E) The results of such analyses; and
 - (F) The operating conditions as existing at the time of sampling or measurement. [3004(a)(4)(B)]
20. The operator shall maintain records pursuant to Rule 109 and any applicable material safety data sheet (MSDS) for any equipment claimed to be exempt from a written permit by Rule 219 based on the information in those records. [219(t)]
21. The operator shall keep all records of monitoring data required by this permit or by regulatory requirements for a period of at least five years from the date of the monitoring sample, measurement, report, or application. [3004(a)(4)(E)]

REPORTING PROVISIONS

22. The operator shall comply with the following requirements for prompt reporting of deviations:
- (A) Breakdowns shall be reported as required by Rule 430 – Breakdown Provisions or subdivision (i) of Rule 2004 - Requirements, whichever is applicable.



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION K: TITLE V Administration

- (B) Other deviations from permit or applicable rule emission limitations, equipment operating conditions, or work practice standards, determined by observation or by any monitoring or testing required by the permit or applicable rules that result in emissions greater than those allowed by the permit or applicable rules shall be reported within 72 hours (unless a shorter reporting period is specified in an applicable State or Federal Regulation) of discovery of the deviation by contacting AQMD enforcement personnel assigned to this facility or otherwise calling (800) CUT-SMOG.
 - (C) A written report of such deviations reported pursuant to (B), and any corrective actions or preventative measures taken, shall be submitted to AQMD, in an AQMD approved format, within 14 days of discovery of the deviation.
 - (D) All other deviations shall be reported with the monitoring report required by condition no. 23. [3004(a)(5)]
23. Unless more frequent reporting of monitoring results are specified in other permit conditions or in regulatory requirements, the operator shall submit reports of any required monitoring to the AQMD at least twice per year. The report shall include a) a statement whether all monitoring required by the permit was conducted; and b) identification of all instances of deviations from permit or regulatory requirements. A report for the first six calendar months of the year is due by August 31 and a report for the last six calendar months of the year is due by February 28. [3004(a)(4)(F)]
24. The operator shall submit to the Executive Officer and to the Environmental Protection Agency (EPA), an annual compliance certification. For RECLAIM facilities, the certification is due when the Annual Permit Emissions Program (APEP) report is due and shall cover the same reporting period. For other facilities, the certification is due on March 1 for the previous calendar year. The certification need not include the period preceding the date the initial Title V permit was issued. Each compliance certification shall include:
- (A) Identification of each permit term or condition that is the basis of the certification;



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

SECTION K: TITLE V Administration

- (B) The compliance status during the reporting period;
- (C) Whether compliance was continuous or intermittent;
- (D) The method(s) used to determine compliance over the reporting period and currently, and
- (E) Any other facts specifically required by the Executive Officer to determine compliance.

The EPA copy of the certification shall be sent to: Director of the Air Division Attn:
Air-3 USEPA, Region IX 75 Hawthorne St. San Francisco, CA 94105 [3004(a)(10)(E)]

25. All records, reports, and documents required to be submitted by a Title V operator to AQMD or EPA shall contain a certification of accuracy consistent with Rule 3003(c)(7) by a responsible official (as defined in Rule 3000). [3004(a)(12)]

PERIODIC MONITORING

26. All periodic monitoring required by this permit pursuant to Rule 3004(a)(4)(c) is based on the requirements and justifications in the AQMD document "Periodic Monitoring Guidelines for Title V Facilities" or in case-by-case determinations documented in the TitleV application file. [3004(a)(4)]



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

SECTION K: TITLE V Administration

FACILITY RULES

This facility is subject to the following rules and regulations

With the exception of Rule 402, 473, 477, 1118 and Rules 1401 through 1420, the following rules that are designated as non-federally enforceable are pending EPA approval as part of the state implementation plan. Upon the effective date of that approval, the approved rule(s) will become federally enforceable, and any earlier versions of those rules will no longer be federally enforceable.

RULE SOURCE	Adopted/Amended Date	FEDERAL Enforceability
RULE 1107	1-6-2006	Non federally enforceable
RULE 1107	11-9-2001	Federally enforceable
RULE 1171	11-7-2003	Federally enforceable
RULE 1171	5-1-2009	Non federally enforceable
RULE 118	12-7-1995	Non federally enforceable
RULE 1303(a)(1)-BACT	12-6-2002	Non federally enforceable
RULE 1303(a)(1)-BACT	5-10-1996	Federally enforceable
RULE 1303(b)(2)-Offset	12-6-2002	Non federally enforceable
RULE 1303(b)(2)-Offset	5-10-1996	Federally enforceable
RULE 2005	5-6-2005	Federally enforceable
RULE 2012	5-6-2005	Federally enforceable
RULE 204	10-8-1993	Federally enforceable
RULE 217	1-5-1990	Federally enforceable
RULE 219	9-4-1981	Federally enforceable
RULE 3002	11-14-1997	Federally enforceable
RULE 3003	11-14-1997	Federally enforceable
RULE 3004(a)(4)-Periodic Monitoring	12-12-1997	Federally enforceable
RULE 3005	11-14-1997	Federally enforceable
RULE 3007	10-8-1993	Federally enforceable
RULE 304	1-14-1982	Non federally enforceable
RULE 401	11-9-2001	Non federally enforceable



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

SECTION K: TITLE V Administration

RULE SOURCE	Adopted/Amended Date	FEDERAL Enforceability
RULE 401	3-2-1984	Federally enforceable
RULE 402	5-7-1976	Non federally enforceable
RULE 404	2-7-1986	Federally enforceable
RULE 405	2-7-1986	Federally enforceable
RULE 407	4-2-1982	Federally enforceable
RULE 408	5-7-1976	Federally enforceable
RULE 409	8-7-1981	Federally enforceable
RULE 430	7-12-1996	Non federally enforceable
RULE 701	6-13-1997	Federally enforceable



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX A: NOX AND SOX EMITTING EQUIPMENT EXEMPT FROM WRITTEN
PERMIT PURSUANT TO RULE 219**

1. HEATERS, NATURAL GAS
2. BOILERS, NATURAL GAS



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 1107 01-06-2006]**

Except as otherwise provided in Rule 1107

(1) VOC Content of Coatings

A person shall not apply to metal parts and products subject to the provisions of this rule any coatings, including any VOC-containing materials added to the original coating supplied by the manufacturer, which contain VOC in excess of the limits specified below:

VOC LIMITS Less Water and Less Exempt Compounds Effective Dates								
Coating	Air-Dried				Baked			
	gm/l		lb/gal		gm/l		lb/gal	
	Current	7/1/07	Current	7/1/07	Current	7/1/07	Current	7/1/07
General One-Component	275	275	2.3	2.3	275	275	2.3	2.3
General Multi-Component	340	340	2.8	2.8	275	275	2.3	2.3
Military Specification	340	340	2.8	2.8	275	275	2.3	2.3
Etching Filler	420	420	3.5	3.5	420	420	3.5	3.5
Solar-Absorbent	420	420	3.5	3.5	360	360	3.0	3.0
Heat-Resistant	420	420	3.5	3.5	360	360	3.0	3.0
Extreme High-Gloss	420	340	3.5	2.8	360	360	3.0	3.0
Metallic	420	420	3.5	3.5	420	420	3.5	3.5



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 1107 01-06-2006]**

VOC LIMITS								
Less Water and Less Exempt Compounds								
Effective Dates, cont.								
Coating	Air-Dried				Baked			
	gm/l		lb/gal		gm/l		lb/gal	
	Current	7/1/07	Current	7/1/07	Current	7/1/07	Current	7/1/07
Extreme Performance	420	420	3.5	3.5	360	360	3.0	3.0
Prefabricated Architectural One-Component	420	275	3.5	2.3	275	275	2.3	2.3
Prefabricated Architectural Multi-Component	420	340	3.5	2.8	275	275	2.3	2.3
Touch Up	420	420	3.5	3.5	360	360	3.0	3.0
Repair	420	420	3.5	3.5	360	360	3.0	3.0
Silicone Release	420	420	3.5	3.5	420	420	3.5	3.5
High-Performance Architectural	420	420	3.5	3.5	420	420	3.5	3.5
Camouflage	420	420	3.5	3.5	420	420	3.5	3.5
Vacuum-Metalizing	420	420	3.5	3.5	420	420	3.5	3.5
Mold-Seal	420	420	3.5	3.5	420	420	3.5	3.5
High-Temperature	420	420	3.5	3.5	420	420	3.5	3.5
Electric-Insulating Varnish	420	420	3.5	3.5	420	420	3.5	3.5
Pan Backing	420	420	3.5	3.5	420	420	3.5	3.5
Pretreatment Coatings	420	420	3.5	3.5	420	420	3.5	3.5



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 1107 01-06-2006]**

- (2) A person shall not use VOC-containing materials which have a VOC content of more than 200 grams per liter of material for stripping any coating governed by this rule.



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 1107 11-09-2001]**

Except as otherwise provided in Rule 1107

(1) VOC Content of Coatings

A person shall not apply to metal parts and products subject to the provisions of this rule any coatings, including any VOC-containing materials added to the original coating supplied by the manufacturer, which contain VOC in excess of the limits specified below:

VOC LIMITS Less Water and Less Exempt Compounds Effective Dates								
Coating	Air-Dried				Baked			
	gm/l		lb/gal		gm/l		lb/gal	
	Current	7/1/07	Current	7/1/07	Current	7/1/07	Current	7/1/07
General One-Component	275	275	2.3	2.3	275	275	2.3	2.3
General Multi-Component	340	340	2.8	2.8	275	275	2.3	2.3
Military Specification	340	340	2.8	2.8	275	275	2.3	2.3
Etching Filler	420	420	3.5	3.5	420	420	3.5	3.5
Solar-Absorbent	420	420	3.5	3.5	360	360	3.0	3.0
Heat-Resistant	420	420	3.5	3.5	360	360	3.0	3.0
Extreme High-Gloss	420	340	3.5	2.8	360	360	3.0	3.0
Metallic	420	420	3.5	3.5	420	420	3.5	3.5



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 1107 11-09-2001]**

Except as otherwise provided in Rule 1107

(1) VOC Content of Coatings

A person shall not apply to metal parts and products subject to the provisions of this rule any coatings, including any VOC-containing materials added to the original coating supplied by the manufacturer, which contain VOC in excess of the limits specified below:

VOC LIMITS Less Water and Less Exempt Compounds Effective Dates								
Coating	Air-Dried				Baked			
	gm/l		lb/gal		gm/l		lb/gal	
	Current	7/1/07	Current	7/1/07	Current	7/1/07	Current	7/1/07
General One-Component	275	275	2.3	2.3	275	275	2.3	2.3
General Multi-Component	340	340	2.8	2.8	275	275	2.3	2.3
Military Specification	340	340	2.8	2.8	275	275	2.3	2.3
Etching Filler	420	420	3.5	3.5	420	420	3.5	3.5
Solar-Absorbent	420	420	3.5	3.5	360	360	3.0	3.0
Heat-Resistant	420	420	3.5	3.5	360	360	3.0	3.0
Extreme High-Gloss	420	340	3.5	2.8	360	360	3.0	3.0
Metallic	420	420	3.5	3.5	420	420	3.5	3.5



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 1107 11-09-2001]**

VOC LIMITS Less Water and Less Exempt Compounds Effective Dates, cont.								
Coating	Air-Dried				Baked			
	gm/l		lb/gal		gm/l		lb/gal	
	Current	7/1/07	Current	7/1/07	Current	7/1/07	Current	7/1/07
Extreme Performance	420	420	3.5	3.5	360	360	3.0	3.0
Prefabricated Architectural One-Component	420	275	3.5	2.3	275	275	2.3	2.3
Prefabricated Architectural Multi-Component	420	340	3.5	2.8	275	275	2.3	2.3
Touch Up	420	420	3.5	3.5	360	360	3.0	3.0
Repair	420	420	3.5	3.5	360	360	3.0	3.0
Silicone Release	420	420	3.5	3.5	420	420	3.5	3.5
High-Performance Architectural	420	420	3.5	3.5	420	420	3.5	3.5
Camouflage	420	420	3.5	3.5	420	420	3.5	3.5
Vacuum-Metalizing	420	420	3.5	3.5	420	420	3.5	3.5
Mold-Seal	420	420	3.5	3.5	420	420	3.5	3.5
High-Temperature	420	420	3.5	3.5	420	420	3.5	3.5
Electric-Insulating Varnish	420	420	3.5	3.5	420	420	3.5	3.5
Pan Backing	420	420	3.5	3.5	420	420	3.5	3.5
Pretreatment Coatings	420	420	3.5	3.5	420	420	3.5	3.5

- (2) A person shall not use VOC-containing materials which have a VOC content of more than 200 grams per liter of material for stripping any coating governed by this rule.



FACILITY PERMIT TO OPERATE SIERRA ALUMINUM COMPANY

APPENDIX B: RULE EMISSION LIMITS [RULE 1171 11-07-2003]

(1) Solvent Requirements

A person shall not use a solvent to perform solvent cleaning operations unless the solvent complies with the applicable requirements set forth below:

SOLVENT CLEANING ACTIVITY	CURRENT LIMITS
	VOC g/l (lb/gal)
(A) Product Cleaning During Manufacturing Process Or Surface Preparation For Coating, Adhesive, Or Ink Application	
(i) General	25 (0.21)
(ii) Electrical Apparatus Components & Electronic Components	500 (4.2)
(iii) Medical Devices & Pharmaceuticals	800 (6.7)
(B) Repair and Maintenance Cleaning	
(i) General	25 (0.21)
(ii) Electrical Apparatus Components & Electronic Components	900 (7.5)



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 1171 11-07-2003]**

SOLVENT CLEANING ACTIVITY	CURRENT LIMITS
	VOC g/l (lb/gal)
(iii) Medical Devices & Pharmaceuticals	
(A) Tools, Equipment, & Machinery	800 (6.7)
(B) General Work Surfaces	600 (5.0)
(C) Cleaning of Coatings or Adhesives Application Equipment	550 (4.6)
(D) Cleaning of Ink Application Equipment	
(i) General	25 (0.21)
(ii) Flexographic Printing	25 (0.21)
(iii) Gravure Printing	
(A) Publication	750 (6.3)
(B) Packaging	25 (0.21)
(iv) Lithographic or Letter Press Printing	

**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 1171 11-07-2003]**

SOLVENT CLEANING ACTIVITY	CURRENT LIMITS
	VOC g/l (lb/gal)
(A) Roller Wash – Step 1	600 (5.0)
(B) Roller Wash-Step 2, Blanket Wash, & On-Press Components	800 (6.7)
(C) Removable Press Components	25 (0.21)
(v) Screen Printing	750 (6.3)
(vi) Ultraviolet Ink/ Electron Beam Ink Application Equipment (except screen printing)	800 (6.7)
(vii) Specialty Flexographic Printing	600 (5.0)
(E) Cleaning of Polyester Resin Application Equipment	25 (0.21)



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 1171 05-01-2009]**

(1) Solvent Requirements

A person shall not use a solvent to perform solvent cleaning operations unless the solvent complies with the applicable requirements set forth below:

	CURRENT LIMITS*	EFFECTIVE 1/1/2010
SOLVENT CLEANING ACTIVITY	VOC g/l (lb/gal)	VOC g/l (lb/gal)
(A) Product Cleaning During Manufacturing Process Or Surface Preparation For Coating, Adhesive, Or Ink Application		
(i) General	25 (0.21)	
(ii) Electrical Apparatus Components & Electronic Components	100 (0.83)	
(iii) Medical Devices & Pharmaceuticals	800 (6.7)	
(B) Repair and Maintenance Cleaning		
(i) General	25 (0.21)	
(ii) Electrical Apparatus Components & Electronic Components	100 (0.83)	



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 1171 05-01-2009]**

	CURRENT LIMITS*	EFFECTIVE 1/1/2010
SOLVENT CLEANING ACTIVITY (cont.)	VOC g/l (lb/gal)	VOC g/l (lb/gal)
(iii) Medical Devices & Pharmaceuticals		
(A) Tools, Equipment, & Machinery	800 (6.7)	
(B) General Work Surfaces	600 (5.0)	
(C) Cleaning of Coatings or Adhesives Application Equipment	25 (0.21)	
(D) Cleaning of Ink Application Equipment		
(i) General	25 (0.21)	
(ii) Flexographic Printing	25 (0.21)	
(iii) Gravure Printing		
(A) Publication	100 (0.83)	
(B) Packaging	25 (0.21)	
(iv) Lithographic (Offset) or Letter Press Printing		
(A) Roller Wash, Blanket Wash, & On-Press Components	100 (0.83)	



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 1171 05-01-2009]**

	CURRENT LIMITS*	EFFECTIVE 1/1/2010
SOLVENT CLEANING ACTIVITY (cont.)	VOC g/l (lb/gal)	VOC g/l (lb/gal)
(B) Removable Press Components	25 (0.21)	
(v) Screen Printing	100 (0.83)	
(vi) Ultraviolet Ink/ Electron Beam Ink Application Equipment (except screen printing)	650 (5.4)	100 (0.83)
(vii) Specialty Flexographic Printing	100 (0.83)	
(E) Cleaning of Polyester Resin Application Equipment	25 (0.21)	

* The specified limits remain in effect unless revised limits are listed in subsequent columns.



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 404 10-05-1979]**

The operator shall not discharge into the atmosphere from this equipment, particulate matter in excess of the concentration at standard conditions, shown in Table 404(a). Where the volume discharged is between figures listed in the Table, the exact concentration permitted to be discharged shall be determined by linear interpolation.

For the purposes of this rule, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.

TABLE 404(a)

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
25 or less	883 or less	450	0.196	900	31780	118	0.0515
30	1059	420	.183	1000	35310	113	.0493
35	1236	397	.173	1100	38850	109	.0476
40	1413	377	.165	1200	42380	106	.0463
45	1589	361	.158	1300	45910	102	.0445



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 404 10-05-1979]**

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
50	1766	347	.152	1400	49440	100	.0437
60	2119	324	.141	1500	52970	97	.0424
70	2472	306	.134	1750	61800	92	.0402
80	2825	291	.127	2000	70630	87	.0380
90	3178	279	.122	2250	79460	83	.0362
100	3531	267	.117	2500	88290	80	.0349
125	4414	246	.107	3000	105900	75	.0327
150	5297	230	.100	4000	141300	67	.0293
175	6180	217	.0947	5000	176600	62	.0271
200	7063	206	.0900	6000	211900	58	.0253
250	8829	190	.0830	8000	282500	52	.0227
300	10590	177	.0773	10000	353100	48	.0210
350	12360	167	.0730	15000	529700	41	.0179
400	14130	159	.0694	20000	706300	37	.0162
450	15890	152	.0664	25000	882900	34	.0148



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 404 10-05-1979]**

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
500	17660	146	.0637	30000	1059000	32	.0140
600	21190	137	.0598	40000	1413000	28	.0122
700	24720	129	.0563	50000	1766000	26	.0114
800	28250	123	.0537	70000 or more	2472000 or more	23	.0100



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 404 02-07-1986]**

The operator shall not discharge into the atmosphere from this equipment, particulate matter in excess of the concentration at standard conditions, shown in Table 404(a). Where the volume discharged is between figures listed in the Table, the exact concentration permitted to be discharged shall be determined by linear interpolation.

For the purposes of this rule, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.

TABLE 404(a)

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter ² Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
25 or less	883 or less	450	0.196	900	31780	118	0.0515
30	1059	420	.183	1000	35310	113	.0493
35	1236	397	.173	1100	38850	109	.0476
40	1413	377	.165	1200	42380	106	.0463
45	1589	361	.158	1300	45910	102	.0445



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 404 02-07-1986]**

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
50	1766	347	.152	1400	49440	100	.0437
60	2119	324	.141	1500	52970	97	.0424
70	2472	306	.134	1750	61800	92	.0402
80	2825	291	.127	2000	70630	87	.0380
90	3178	279	.122	2250	79460	83	.0362
100	3531	267	.117	2500	88290	80	.0349
125	4414	246	.107	3000	105900	75	.0327
150	5297	230	.100	4000	141300	67	.0293
175	6180	217	.0947	5000	176600	62	.0271
200	7063	206	.0900	6000	211900	58	.0253
250	8829	190	.0830	8000	282500	52	.0227
300	10590	177	.0773	10000	353100	48	.0210
350	12360	167	.0730	15000	529700	41	.0179
400	14130	159	.0694	20000	706300	37	.0162
450	15890	152	.0664	25000	882900	34	.0148



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 404 02-07-1986]**

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter ² Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
500	17660	146	.0637	30000	1059000	32	.0140
600	21190	137	.0598	40000	1413000	28	.0122
700	24720	129	.0563	50000	1766000	26	.0114
800	28250	123	.0537	70000 or more	2472000 or more	23	.0100



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 405 02-07-1986]**

The operator shall not discharge into the atmosphere from this equipment, solid particulate matter including lead and lead compounds in excess of the rate shown in Table 405(a).

Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.

For the purposes of this rule, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.

TABLE 405(a)

Process Weight Per Hour		Maximum Discharge Rate Allowed for Solid Particulate Matter (Aggregate Discharged From All Points of Process)		Process Weight Per Hour		Maximum Discharge Rate Allowed for Solid Particulate Matter (Aggregate Discharged From All points of Process)	
Kilograms Per Hour	Pounds Per Hour	Kilograms Per Hour	Pounds Per Hour	Kilograms Per Hour	Pounds Per Hour	Kilograms Per Hour	Pounds Per Hour
100 or less	220 or less	0.450	0.99	9000	19840	5.308	11.7
150	331	0.585	1.29	10000	22050	5.440	12.0
200	441	0.703	1.55	12500	27560	5.732	12.6
250	551	0.804	1.77	15000	33070	5.982	13.2
300	661	0.897	1.98	17500	38580	6.202	13.7
350	772	0.983	2.17	20000	44090	6.399	14.1
400	882	1.063	2.34	25000	55120	6.743	14.9
450	992	1.138	2.51	30000	66140	7.037	15.5
500	1102	1.209	2.67	35000	77160	7.296	16.1
600	1323	1.340	2.95	40000	88180	7.527	16.6



**FACILITY PERMIT TO OPERATE
SIERRA ALUMINUM COMPANY**

**APPENDIX B: RULE EMISSION LIMITS
[RULE 405 02-07-1986]**

Process Weight Per Hour		Maximum Discharge Rate Allowed for Solid Particulate Matter (Aggregate Discharged From All Points of Process		Process Weight Per Hour		Maximum Discharge Rate Allowed for Solid Particulate Matter (Aggregate Discharged From All points of Process	
Kilograms Per Hour	Pounds Per Hour	Kilograms Per Hour	Pounds Per Hour	Kilograms Per Hour	Pounds Per Hour	Kilograms Per Hour	Pounds Per Hour
700	1543	1.461	3.22	45000	99210	7.738	17.1
800	1764	1.573	3.47	50000	110200	7.931	17.5
900	1984	1.678	3.70	60000	132300	8.277	18.2
1000	2205	1.777	3.92	70000	154300	8.582	18.9
1250	2756	2.003	4.42	80000	176400	8.854	19.5
1500	3307	2.206	4.86	90000	198400	9.102	20.1
1750	3858	2.392	5.27	100000	220500	9.329	20.6
2000	4409	2.563	5.65	125000	275600	9.830	21.7
2250	4960	2.723	6.00	150000	330700	10.26	22.6
2500	5512	2.874	6.34	175000	385800	10.64	23.5
2750	6063	3.016	6.65	200000	440900	10.97	24.2
3000	6614	3.151	6.95	225000	496000	11.28	24.9
3250	7165	3.280	7.23	250000	551200	11.56	25.5
3600	7716	3.404	7.50	275000	606300	11.82	26.1
4000	8818	3.637	8.02	300000	661400	12.07	26.6
4500	9921	3.855	8.50	325000	716500	12.30	27.1
5000	11020	4.059	8.95	350000	771600	12.51	27.6
6000	13230	4.434	9.78	400000	881800	12.91	28.5
7000	15430	4.775	10.5	450000	992100	13.27	29.3
8000	17640	5.089	11.2	500000 or more	1102000 or more	13.60	30.0